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ABSTRACT

This document evaluates a resource room model for 10 educable mentally retarded and 15 mildly educationally handicapped junior high school students in Michigan. Discussed in the overview are curriculum organization, individual assessment, and remediation by two teachers in areas of mathematics, home economics, English, and science. Described are evaluation design procedures such as pretest and posttests, performance comparison of resource room students and traditional special education students (controls), and objectives. Reported are data collection procedures, and given for objectives are the following major results: (1) five of eight resource room students made significant gains in self-concept (resource room and control students made equal gains), (2) 10 of 15 resource students made significant gains on a standardized reading test (controls made significantly greater gains than resource students), (3) 13 resource students made gains from 1 percent to 33 percent on a teacher made reading test, (4) 12 of 15 resource students made positive gains on the standardized arithmetic test (the resource group made significantly greater gains than controls), and (5) 15 students made significant gains (from 1 percent to 200 percent) on a nonstandardized arithmetic test. Results of parental and teacher surveys indicate favor for the curriculum and desire for continuation of the program. Included are information about program factors such as student mobility and parent involvement. (Appendixes contain a resource room calendar for 1971 through 1973 and questionnaire samples.) (MC)

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SUMMARY AND EVALUATION OF THE RESOURCE ROOM FOR THE EDUCABLE MENTALLY HANDICAPPED AND THE OPPORTUNITY GROUP STUDENT

PORTAGE PUBLIC SCHOOLS
DISTRICT CODE NUMBER 39-410

FOR SCHOOL YEAR 1972-1973

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EC062459

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INTRODUCTION

During the 1972-1973 school year, the Portage Public School System received state, intermediate and local approval for the implementation of an experimental "resource room" program. Representing a mutual committment by both general and special education, this pilot project was initiated in September, 1972, at North Junior High School in Portage, Michigan.

The information contained in this report represents both an objective and subjective analysis of project results as evaluated at the conclusion of the first year of operation.

OVERVIEW OF PROJECT

In an effort to more adequately meet the needs of both Type A and opportunity group students, a "resource room" model was implemented in September, 1972, at North Junior High School in Portage, Michigan.

During the first year of operation, this pilot project serviced ten (10) educable mentally handicapped and fifteen (15) opportunity group[1] junior high school students. This population represented fifteen (15) students at the seventh grade level, six (6) students at the eighth grade level and four (4) at the ninth grade level.

This resource room model was designed to alleviate two undesirable conditions pertaining specifically to the special education student. These are:

(1) the negative effects of disability labeling (resulting in social ostracism by peers and feelings of self-derogation by the student); and

(2) the inability of regular class teachers to provide meaningful experiences for special education students in integrated classrooms where student numbers and ability ranges are already overwhelming.

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[1]For purposes of this report, "opportunity group students" are pupils (seventh, eighth and ninth grade) who have been identified as possessing mild educational handicaps, but remain in the mainstream of the school curriculum.

Two additional problems related to the education of opportunity group students were also recognized. These are:

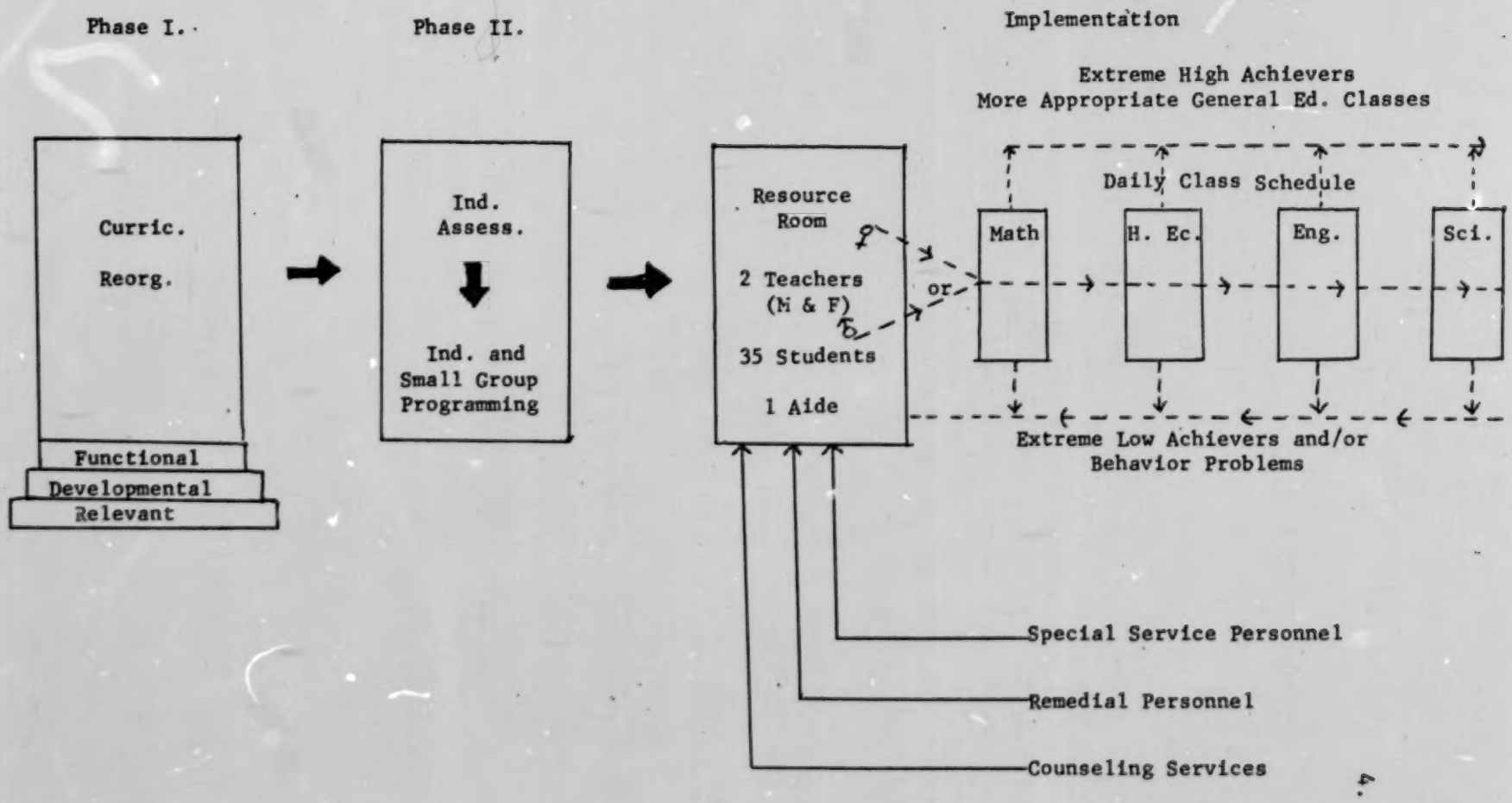
(3) although not mentally handicapped, many of the students presently enrolled in this program "function" below grade level; and

(4) the range, types and numbers of disabilities (i.e., dyslexic, perceptually handicapped, emotionally disturbed) are often greater than those found in special class placement. Yet these students are largely denied remedial and diagnostic services as well as the instruction of special class teachers.

In an attempt to overcome these four problem areas, the following procedure and resulting resource room model were developed. For purposes of text clarification, a schematic diagram (Chart A) appears on the following page.

Phase I involved total curriculum reorganization and development. This process was conducted during school year 1971-1972 and involved the cooperative effort of ten regular class teachers, the special education teacher, and the Curriculum Resource Consultant from the Kalamazoo Valley Intermediate School District. The objective here was not one of "watering down" existing curriculum goals, but developing (in writing) guidelines in each subject area in terms of the functional, developmental and relevant needs of the students to be served.

CHART A


Phase I.
Phase II.
Implementation
Extreme High Achievers
More Appropriate General Ed. Classes
Curric.
Reorg.
Functional
Developmental
Relevant
Ind.
Assess.
Ind. and
Small Group
Programming
Resource
Room
2 Teachers
(M & F)
35 Students
1 Aide
or
Daily Class Schedule
Math
H. Ec.
Eng.
Sci.
Extreme Low Achievers and/or
Behavior Problems
Special Service Personnel
Remedial Personnel
Counseling Services

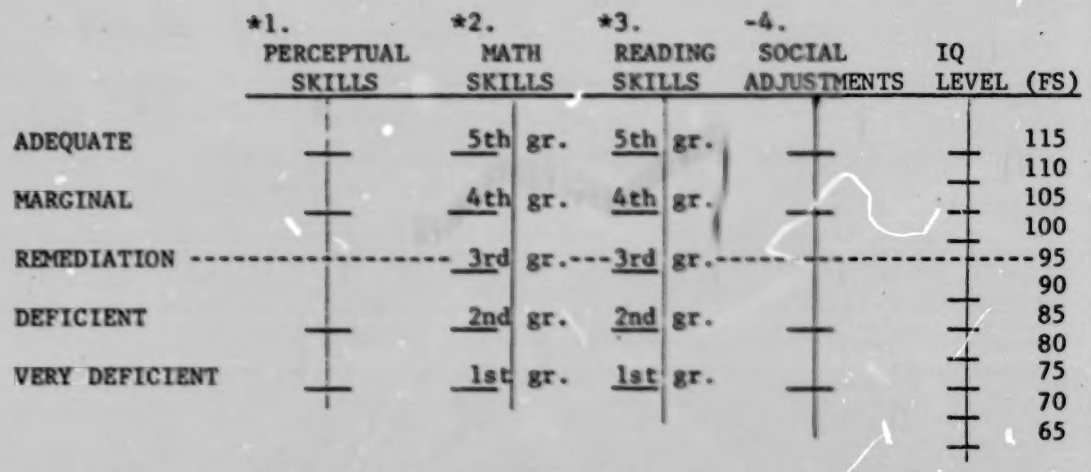
Name _____ CHART B

Sept. '72 - red (base line)
Jan. '73 - blue (mid- year line)
June '73 - green (terminal)

FALL PRESCRIPTIVE INVENTORY

REMEDIATION PROFILE AND PRESCRIPTIVE INVENTORY

(1972-1973)



*Specific deficit area(s) or skill is indicated below
-Refer also to comments under "Self Concept Inventories", pg. ___

1. Perceptual Skills

   a. Specific Deficit Areas

      1. _____ 3. _____

      2. _____ 4. _____

   b. Prescriptive Techniques Indicated *( )

      _____

      _____

      _____

2. Math Skills

   a. Deficit Skills

      1. _____ 3. _____

      2. _____ 4. _____

3. Reading Skills

a. Specific Deficit Areas 6.

1. _____ 3. _____

2. _____ 4. _____

b. Remedial Reading Techniques Indicated: *( )

_____

_____

_____

4. Social Adjustment

a. Behavioral Deficits

1. _____

2. _____

3. _____

4. _____

b. Behavioral Modification Techniques Indicated: *( )

_____

_____

_____

*( ) -- indicated specialized personnel responsible for formulating prescriptive and/or remedial techniques. Code:

SD -- School Diagnostician
PD -- Perceptual Development Consultant
SS -- School Social Worker
RR -- Remedial Reading Consultant
GC -- Guidance Counselor
SP -- Speech Therapist
TC -- Teacher Counselor

Phase II of this program entailed assessment of all pupils who were to be enrolled in this program. This evaluation was conducted by two school psychologists from our special education department.

The test design included two major evaluation approaches: (1) overall testing of a student's academic abilities in selected skill areas. In addition, there was also an evaluation of each student's social and emotional maturity as well as mental ability. All data, furthermore, was recorded in a brief profile form which was used as a tool that indicated deficit as well as strength areas. The profile form is presented in Chart B and appears on pages five and six. (2) In selected subject areas (i.e. reading and mathematics), tests were developed in terms of course objectives developed during Phase I. Results of such testing were used for individual and/or small group programming during the implementation phase of this program.

Prior to the termination of the 1971-1972 school year, the names of students from the general education population who had been referred and were fully tested were presented to a multi-disciplinary "Educational Planning Committee" for consideration, approval and placement.

Implementation Phase. Contingent to the completion of the foregoing two steps, a resource room model was established in September 1972. This room carried no identifying label except existing homeroom designations. Two teachers (one male, one female) were assigned to the resource room.[2]

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[2] Staffing was also to include the utilization of one para-professional aide. However, because student enrollment was less than anticipated, the assistance of this aide was not deemed necessary to the successful operation of this program.

One of the teachers was a certified teacher of the mentally impaired. The other was a certified teacher of the emotionally disturbed. One of these instructors remained in the resource room at all times. The other accompanied this group of students to their assigned classes which were held in the mainstream of the physical plant.

The "traveling" teacher had a supportative and/or team role. Prior testing enabled the regular subject teacher to group students into several different level working units. In general, as he worked with one unit, the traveling teacher assisted the others, helped maintain control, or carried on a different activity.

It should be noted that for each area, students found to be extreme low achievers and/or behavioral problems (which inhibited successful group participation) remained in the resource room. Here appropriate materials and remedial assistance were given in an individual, one-to-one learning situation. The goal, of course, was to return the student to the educational mainstream as soon as possible. This procedure also provided that a student who was deficient in one area was not automatically excluded from classes where success was possible.

In addition, this organization more easily facilitated the utilization of existing special services, remedial and counseling staff. Because students and staff were now more flexibly scheduled, direct participation by specialists became more available and the carrying out of demanding prescriptive techniques more realistic. Flexibility relating to class

size and duration of classes was also achieved.

The established Type A room at North Junior High School became the "resource room" since it was advantageously located in a mainstream wing of the building site and is more adaptable to partitioning for small group and individualized instruction. All other facilities were located in "regular" classrooms throughout the building.

All existing equipment from our present Type A room, our audio-visual center, our reading consultant and our special education department were made available to this project and were fully utilized in this program. Expenditures for additional equipment and supplies were necessary only to the extent that existing materials proved insufficient to the demands of students in this program.

OVERVIEW OF PROJECT EVALUATION DESIGN

Evaluation Design. To determine the overall effect of this program on student performance, several evaluation procedures were utilized. Such procedures were specifically designed to measure student progress as stated in five clearly defined behavioral objectives.

These behavioral objectives (listed below) were first subjected to objective evaluation. Using appropriate standardized and teacher prepared evaluation instruments, each objective was evaluated on a pre and post test basis. Students were first tested upon entering the program in September, 1972. Follow-up testing was completed six months later (March, 1973). Test results and interpretations are recorded in the sections of this report immediately following the introductory statement.

Subjective evaluations of student performance were also gathered. This information was collected through the utilization of several "questionnaires" which were presented to teachers and parents. These surveys and the collated results are also presented below.

Finally, the performance of the ten educable mentally handicapped students who participated in the resource room program were compared to a "like" group of Type A students who were enrolled in a more traditional special education setting. This data is also summarized below.

Behavioral Objectives. The following behavioral objectives were subjected to the evaluation design summarized above:

(1) Given one year of resource room participation, the student will score significant gains on a self-concept inventory (as indicated by pre and post test scores);

(2) Given one year of resource room participation, the student will score significant gains of at least six months on a standardized reading test;

(3) Given one year of resource room participation, the student will score significant gains (as indicated by comparative pre and post test scores) on a teacher constructed reading test;

(4) Given one year of resource room participation, the student will score significant gains of at least six months on a standardized arithmetic test; and

(5) Given one year of resource room participation, the student will score significant gains (as indicated by comparative pre and post test scores) on a teacher constructed math test.

An evaluation of each behavioral objective appears in the following sections of this report.

EVALUATION OF BEHAVIORAL OBJECTIVE #1:
IMPROVEMENT OF SELF-CONCEPT

Procedure: In September, 1972, all students enrolled in the resource room program were administered the Piers-Harris Children's Self Concept Scale (Counselor Recordings and Tests, c1969).[3] This test consists of eighty statements which reflect concerns that children have about themselves. The statements were read orally while students circled "yes" on test blanks if the item was true for them and "no" if it were not. Raw data that was obtained was converted into percentile scores. The same test and procedure were repeated in March, 1973. Test results, therefore, reflect a time span of only six months.

For purposes of this report, only the data pertaining to the eight (8) educable mentally handicapped students enrolled in this program (for the full six month period) appears below since behavioral objective #1 specifically pertained to this group. Data concerning the remaining students, however, has been compiled and is available upon request.

Results: The pre and post test scores appear in Chart C. The following information can be gleaned from Chart C.

(a) Pre test scores presented in percentile ratings ranged from a low of 27 to a high of 88. The mean score is 55.

(b) Post test scores ranged from a low of 20 to a high of 98, with the mean score established at 61.

---

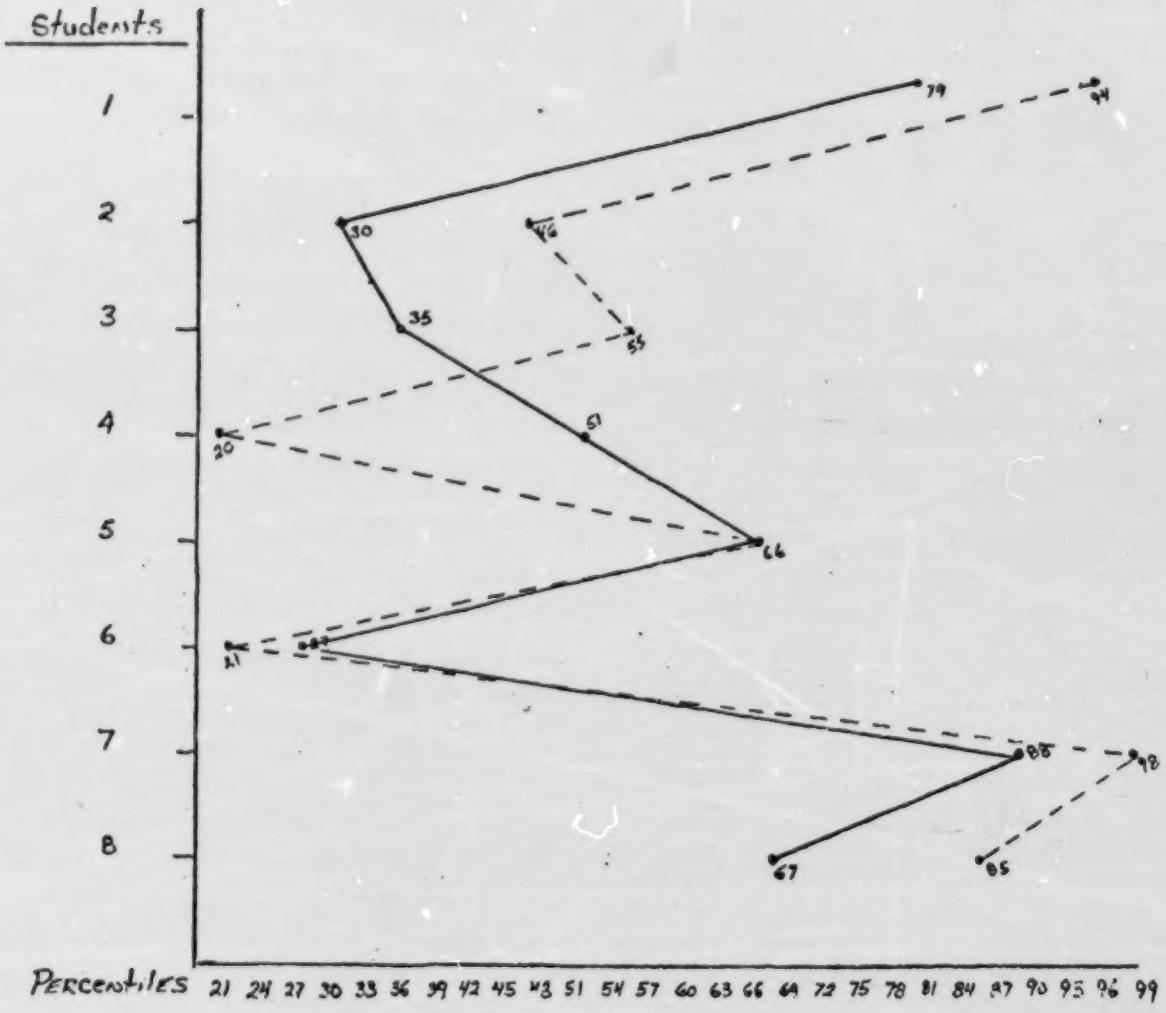
[3] For information concerning the standardization, reliability, validity, etc. concerning this scale, refer to Ellen Pier's Manual for the Children's Self-Concept Scale, Counselor Recordings and Tests, Nashville, Tennessee, 1969, p. 5.

Chart C.

Piers - Harris Children's Self Concept Scale

(Pre + Post Test Scores)

Time Period: 6 mos.



— Pre Test Scores (Sept, 1972)

--- Post Test Scores (April, 1973)

(c) Of the eight students, five made post test gains, one scored the same, while two scored lower than their pre-test scores.

Conclusions: The designer of the test recommended that individual changes in score of less than 10 points be considered insignificant. Thus it may be safe to conclude that on the basis of the above data, five students, or 63% of the population under study made significant changes in self concept in a positive direction (+15, +16, +20, +18, +10, respectively).

This finding supported the first assumption stated as performance objectives in the experimental study.

Comparison of Resource Room and Control Group Students

Procedure: Resource room students were compared to a "like" group of five educable mentally handicapped students enrolled in a more traditional Type A program. These five students represent a control group and were subjected to the same pre and post test procedure indicated above.

Results: Table I indicates the results of pre and post testing for both resource and control groups.

COMPARATIVE RESULTS OF SELF CONCEPT SCORES FOR RESOURCE ROOM STUDENTS AND THE CONTROL GROUP

TABLE I

RESOURCE				CONTROL			
S	Pre	Post	Gain/Loss	S	Pre	Post	Gain/Loss
1	79	94	+15	1	42	49	+7
2	30	46	+16	2	36	51	+15
3	35	55	+20	3	56	57	+1
4	51	20	-31	4	24	30	+6
5	66	66	0	5	60	58	-2
6	27	21	-6				
7	88	98	+10				
8	67	85	+18				

Conclusions: Data from Table I suggests the following conclusions:

(1) As a group, the resource room and control students display essentially equal growth in the area of self-concept improvement. Resource room students' average improvement score was +5.25 as compared to control group gains of +5.40.

(2) Individual scores suggest that resource room students made significantly greater positive scores than did individual control group students.

(3) Average positive gains of resource room students was +15.80, as compared to positive gains of control group students of +7.25.

(4) Individual scores also suggest, however, that in cases where students scored lower on the post test, resource room students tended to score significantly lower than control group students.

(5) In accepting the recommended 10 point change by the designers as significant, then it would be safe to conclude that on the basis of the Piers-Harris Self Concept test, students enrolled in the resource room program made positive and significant gains in self concept compared to their control group counterparts.

EVALUATION OF BEHAVIORAL OBJECTIVE #2:

IMPROVED READING ABILITY - Standardized Test

Procedure: In September, 1972, all students enrolled in the resource room program were administered the Wide Range Achievement Test (Guidance Associates, c1965).[4] The reading section of this test consists of a group of words which are read orally by the student to the examiner. It is, therefore, primarily a test of word recognition. Raw scores achieved by each student were converted to grade level equivalents. The same subtest and procedure were repeated in March, 1973. Pre and post test scores reflect reading gains over a six month span.

For purposes of this report, data concerning reading growth, as indicated on a standardized test instrument, appears only for those students who participated in the resource room program for the full six months. Data concerning students who either moved from the school district or were enrolled later than September 30, 1972, is available upon request.

Results: The pre and post test scores for the fifteen students who were enrolled in this phase of the program for at least six months appear in Chart D.

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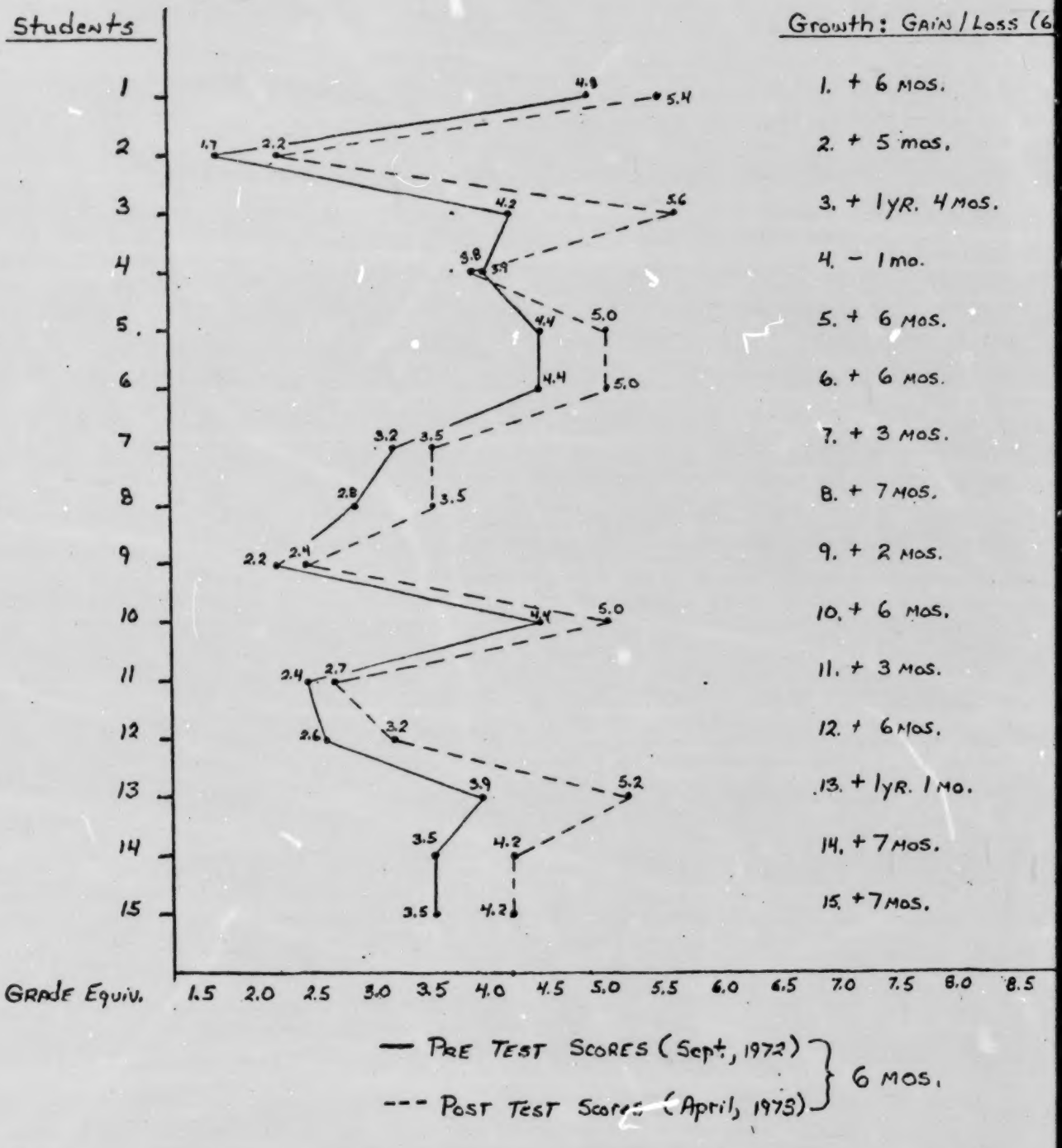
[4]For information concerning the standardization, reliability, validity, etc. concerning this test refer to J.F. Jastak and S.R. Jastak, Manual, The Wide Range Achievement Test, Guidance Associates, Delaware, c1965.

CHART D.

Wide Range Achievement Test

(Reading Subtest)

Pre + Post Test Scores



This data indicates that pre test scores (grade equivalents) ranged from a low of 1.7 to a high of 4.4. The mean score was 3.5

Post test scores ranged from a low of 2.2 to a high of 5.6 with a mean score of 4.1.

The data also indicates that fourteen students made positive gains and that only one student recorded a score lower than the pre test score.

Conclusions: Behavioral Objective #2 called for testable reading growth of six months. As this data indicates, ten students or 66% of the sample population, achieved or exceeded this stated objective. Four students made positive gains less than six months, and one student scored lower than originally tested by one month. The average growth for all students slightly exceeded +6 months.

The foregoing data suggests that in terms of the stated objective which required reading growth of six months as demonstrated on a standardized test, progress was achieved. Such a growth rate is enhanced by the fact that the average reading score of EMH children is 4 months per year.

Comparison of Resource Room and Control Group Students

Procedure: Students enrolled in the resource room program were also compared to the control group (as previously identified) in the area of reading. Again, control group students were subjected to the same pre

and post test procedure as the resource room group.

Results: Table 2. indicates the results of pre and post testing for both the resource and control groups.

COMPARATIVE RESULTS OF READING RECOGNITION SCORES FOR RESOURCE AND CONTROL GROUP

TABLE 2

RESOURCE				CONTROL			
S	Pre	Post	Gain/Loss	S	Pre	Post	Gain/Loss (mos.)
1	4.8	5.4	+6	1	7.0	8.4	+14
2	1.7	2.2	+5	2	4.2	6.1	+19
3	4.2	5.6	+16	3	2.7	2.9	+2
4	3.9	3.8	-1	4	2.9	3.8	+9
5	4.4	5.0	+6	5	2.3	2.7	+4
6	4.4	5.0	+6				
7	3.2	3.5	+3				
8	2.8	3.5	+7				
9	2.2	2.4	+2				
10	4.4	5.0	+6				
11	2.4	2.7	+3				
12	2.6	3.2	+6				
13	3.9	5.2	+13				
14	3.5	4.2	+7				
15	3.5	4.2	+7				

Conclusions: Data from Table 2. suggest the following conclusions. As a group the students comprising the control population scores significantly greater gains than did resource room students. Average growth scores of the control group was +9 months as compared to +6 months for the resource room population.

The data also suggests that individual growth scores tended to be greater in the control population than in the resource room group.

The data indicates, therefore, that in terms of this study the more traditional Type A setting appears to be more conducive to reading progress.

EVALUATION OF BEHAVIORAL OBJECTIVE #3: IMPROVED READING ABILITY - NON-STANDARDIZED TEST

Procedure: In September, 1972, all students enrolled in the resource room program were administered a non-standardized, teacher, developed reading test.[5] This instrument represents a composite of many recognized reading tests including the California, Stanford, Durrell, and MacMillan. This test attempted to evaluate the following four skill areas: (1) sight vocabulary; (2) phonetic skills; (3) word attack skills; and (4) comprehension.

The test was administered in a one-to-one situation. The student made both verbal and non-verbal responses as required by the task to be performed. Task responses for the major portions of this test were not recorded as number or grade equivalent scores. Rather, a test response profile was used to record written comments about each student's approach to a given reading task. The same test and procedure were repeated in March, 1973, for all students who had been enrolled in the resource room program for a minimum of six months.

Results: As indicated above, most of this non-standardized test instrument yielded written data as opposed to statistical data. Therefore, only scores obtained from the section of this test dealing with "sight vocabulary" are presented here. Pre and post test scores for the

---

[5] This test is available upon request.

thirteen students enrolled in this phase of the resource room program appear in Table 3, on page 22. The data from Table 3 indicates that pre test raw scores ranged from 121 to a high of 211. Post test scores ranged from a low of 204 to a high of 220. All students made gains which ranged from a low advance of +1 percent to a high of +33 percent. The average gain for the group is +11 percent.

COMPARATIVE RESULTS PRE & POST TEST SCORES
ON TEACHER GRADE READING FOR RESOURCE ROOM GROUP

TABLE 3

S	Pre (raw score)*	Post (raw score)*	Gain/Loss (in percent)
1	197	219	+10%
2	201	211	+5
3	204	206	+1
4	121	194	+33
5	211	220	+4
6	162	204	+19
7	197	217	+9
8	148	218	+32
9	211	214	+2
10	178	212	+19
11	205	217	+6
12	213	219	+3
13	208	219	+5

*220 pt. total

Conclusions: Since this is a non-standardized test, it is impossible to make a definite statement concerning "significant" results. The data does seem to indicate, however, that for students who obtained a pre test raw score of less than 150 scored much greater gains than those scoring above this level. In general, then, it appears that poorer

sight readers tended to greatly increase this skill. More proficient sight readers made only slight improvement or extended post test scores to the upper limits of this test.

EVALUATION OF BEHAVIORAL OBJECTIVE #4:
IMPROVED ARITHMETIC SKILL - STANDARDIZED TEST

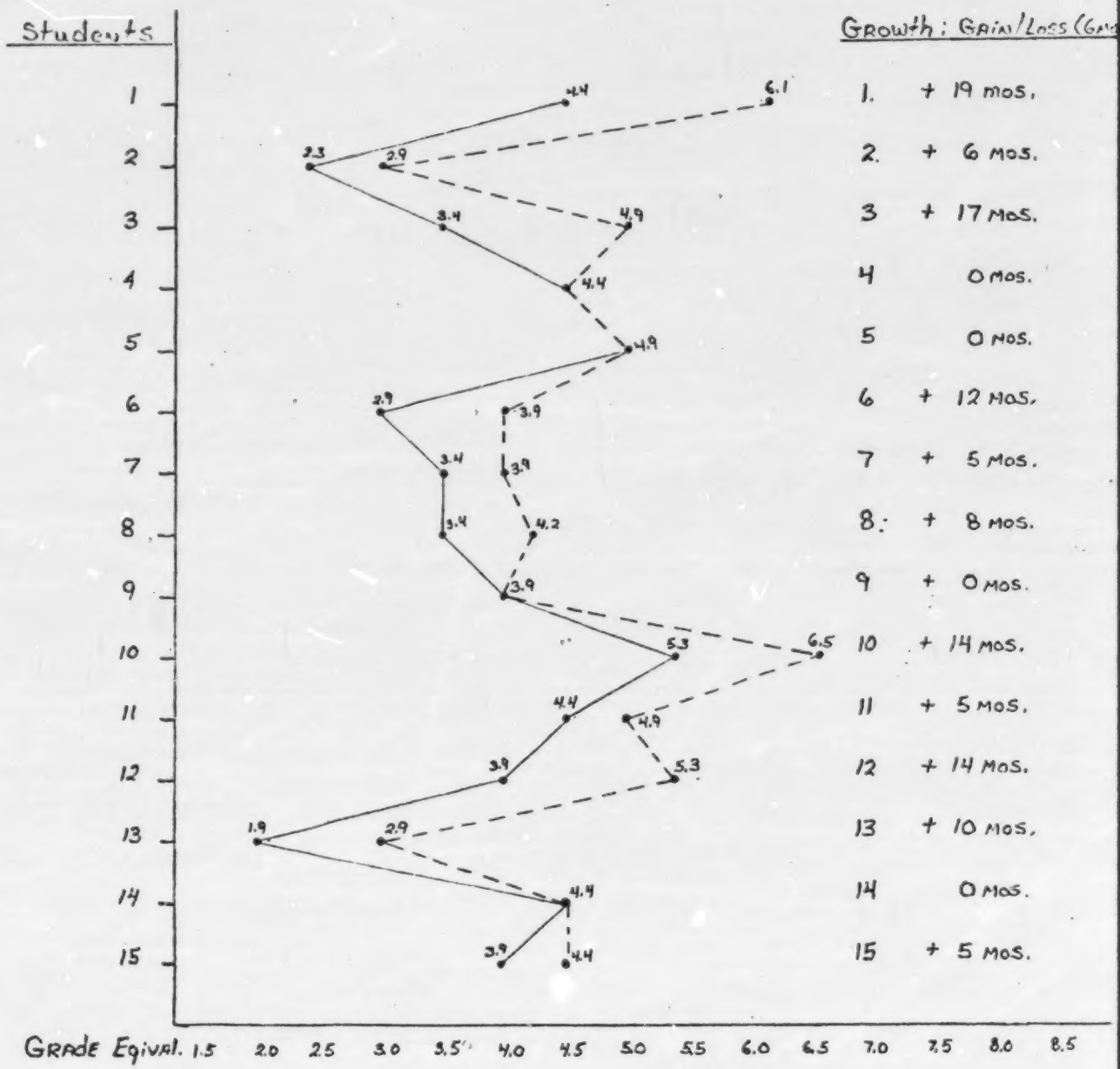
Procedure: In September, 1972, the arithmetic section of the Wide Range Achievement Test was administered to all resource room students. This sub-test consists of a series of problems which begin at a very elementary level and gradually increase in difficulty. The student is given ten minutes to compute as many problems as possible. Correct responses (raw scores) are converted to grade level equivalents. The same subtest and procedure were repeated in March, 1973. Post test scores reflect student progress over a six month learning period.

The data reported here reflects test results for only those students who participated in this program for at least six months. Data concerning the remaining students is available upon request.

Results: Pre and post test scores for the fifteen students who were enrolled in this phase of the program appear in Chart E.

CHART 5

Wide Range Achievement Test
(Arithmetic Subtest)
Pre + Post Test Scores



— Pre Test Scores (Sept., '72)
--- Post Test Scores (April, '73)

6 mos.

Pre test scores ranged from a low of 1.9 to a high of 5.3. The mean score being 3.8. Post test scores ranged from a low of 2.9 to a high of 6.5. The mean score being 4.5.

Twelve students made gains in a positive direction. Three students made no testable gains. No student displayed movement in a negative direction.

Growth rates ranged from a low of 0 months to a high of +19 months. The average rate of growth for this population was +7.0 months.

Conclusions: Behavioral objective #4 required a testable reading growth of six months. The data above indicates that eight students, or 53% of the population, achieved or exceeded this requirement. Three students made positive gains less than six months (+5 months) and four students recorded no re-test gains (0 months). No student scored lower than originally tested.

In view of several remarkable individual growth gains and a group average gain of +7 months, it is felt that the requirements of behavioral objective #4 have been successfully achieved.

Comparison of Resource Room and Control Group Students

Procedure: Resource room and control group students were also compared in the area of arithmetic growth as measured by a standardized test instrument. Control group students were subjected to the same pre and

post test procedures as were the resource room students (as outlined above).

Results: Table 4 indicates the results of pre and post testing for both groups.

COMPARISON OF RESOURCE ROOM AND CONTROL GROUP STUDENTS

TABLE 4

	RESOURCE				CONTROL		
S	Pre	Post	Gain/Loss (6 mos.)	S	Pre	Post	Gain/Loss (6 mos.)
1	4.4	6.1	+19	1	5.7	5.0	-7
2	2.3	2.9	+6	2	4.2	4.7	+5
3	3.4	4.9	+17	3	4.2	4.2	0
4	4.4	4.4	0	4	3.9	4.7	+8
5	4.9	4.9	0	5	4.2	4.2	0
6	2.9	3.9	+12				
7	3.4	3.9	+5				
8	3.4	4.2	+8				
9	3.9	3.9	0				
10	5.3	6.5	+14				
11	4.4	4.9	+5				
12	3.9	5.3	+14				
13	1.9	2.9	+10				
14	4.4	4.4	0				
15	3.9	4.4	+5				

Conclusions: The data recorded above indicate the following:

(1) As a group, resource room students scored significantly greater average gains (+7 months) than did control group students (+1 month);

(2) Individual growth rates also tended to be significantly greater for resource room students.

(3) On the basis of the above, it may be concluded that

students enrolled in the resource room program made better gains in arithmetic than those students enrolled in the more traditional Type A setting.

EVALUATION OF BEHAVIORAL OBJECTIVE #5: IMPROVED ARITHMETIC SKILLS - NON-STANDARDIZED TEST

Procedure: In September, 1972, all resource room students were administered a non-standardized, teacher developed arithmetic skills test. The test attempted to measure student proficiency in the following seven skill areas: (1) basic facts; (2) fundamental operations; (3) money concepts; (4) time concepts; (5) measurement concepts; (6) story problems; and (7) fraction skills.

The instrument was presented to students in a group situation. Section 1, "Basic Facts", was administered within a given time limitation. All other sections were computed without such restrictions. Each section of the instrument yielded a raw point score. Each student's individual section scores and total scores were plotted and graphed on an arithmetic profile sheet.[6]

The same test and procedure were repeated in March, 1973, for all students who had participated in the resource room math program for a minimum of six months. Again point scores were entered on the profile sheet.

Results: Data gathered from pre and post testing appears in Table 5.

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[6] This test and profile sheet are available upon request.

EVALUATION OF IMPROVED ARITHMETIC SKILLS

NON-STANDARDIZED TEST

TABLE 5

S	Pre (raw score)	Post (raw score)	Gain/Loss (in percent)
1	213	218	2%
2	38	114	200
3	164	226	35
4	110	189	72
5	146	207	42
6	101	200	98
7	204	206	1
8	87	141	62
9	122	158	30
10	186	217	10
11	82	209	155
12	167	214	28
13	107	190	78
14	38	124	227
15	153	200	31

Pre test raw scores ranged from a low of 38 to a high of 213. The mean point score being 128. Post test scores ranged from 114 to 226. The mean post test score being 188. All students made gains in a positive direction with movement ranging from 1 percent to a high of 200 percent. The average growth for the group is 71 percent.

Conclusions: Because this is a non-standardized test instrument it would be difficult to state significant, exact results. The foregoing data does suggest, however, several trends. It appears that students who obtained low pre-test scores made the most significant post test gains. This indicates that the test accurately portrayed student weaknesses and that instruction in these areas resulted in obvious skill growth. The

data seems to indicate that students who obtained the mean pre test scores also exhibited substantial growth patterns. Finally, students who tended to score near the upper limits of this test instrument on the pre test tended to either reach the limit or more closely approximate it. Again, growth in skill areas is indicated.

It is felt, then, that on this test all students seem to exhibit growth in arithmetic skill areas and thus satisfy the requirements of behavioral objective #5.

PARENT REACTION SURVEY

Procedure: In an attempt to determine the attitudes of parents who had children enrolled in the resource room program, a brief questionnaire[7] was developed. This questionnaire consisted of six open ended statements which were completed by selecting one of three possible responses.

The first three statements were designed to determine how parents felt about the academic progress of their child. The fourth statement attempted to determine whether parents felt their child's progress (or lack of it) was directly attributable to the resource room program. The fifth statement represented an effort to determine parent attitudes about the caliber of the resource room teaching staff. The final survey statement was constructed in an effort to determine if there existed parental committment to this program in terms of what they perceived their child's program should be during the next school year.

A survey form was mailed to the parents of twenty resource room students. These forms were returned to school either by the students or return mail.

Results: Of the twenty surveys distributed to parents, fifteen, or 75 percent of the surveyed population were returned. Data regarding each statement is presented in outline form below.

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[7] See: Appendix 2 on page 46.

Statement 1. Attitude concerning overall classroom work (i.e. curriculum) presented to child:
93% - "just about right"
7% - "too easy for him"
0% - "too difficult for him"

Statement 2. Attitude concerning child's reading and spelling progress:
80% - "improved this year"
20% - "stayed about the same"
0% - "did not improve"

Statement 3. Attitude concerning child's arithmetic progress:
73% - "improved this year"
20% - "stayed about the same"
7% - "did not improve"

Statement 4. Attitude concerning student progress as directly attributable to resource room participation:
100% - "yes"
0% - "no"
0% - "cannot tell"

Statement 5. Attitude concerning teaching staff.
73% - "above average"
27% - "average"
0% - "below average"

Statement 6. Attitude concerning continued placement of child in resource room.
66% - "yes"
7% - "no"
27% - "cannot tell"

Conclusions: The data presented above generally indicates the following conclusions:

(1) Responses to statements 1, 2, and 3 appear to suggest that parents were most positive about the overall curriculum presented to their children and were likewise pleased with growth in the specific areas of language arts and mathematics.

(2) It also appears that an overwhelming number of parents (100% of the sampled population) felt that the resource room program enabled their child to make more progress than he otherwise would have.

(3) The majority of parents also appear to rate resource room teaching personnel higher than teachers in general.

(4) Most parents felt that the successes gained by their children warrant continued participation in the resource room setting. The "yes" score is felt to be somewhat deflated due to the fact that a new junior high school is to be opened next year and several parents anticipate enrolling their children in that setting.

TEACHER REACTION SURVEY

Procedure: An attempt was also made to determine the attitudes of the "regular class" teachers who participated in the resource room program. In April, 1973, these staff members received a questionnaire[8] which contained eight brief paragraphs. At the end of each statement, the staff member was asked to select one of two or three given responses.

Five of these paragraphs (i.e. par. 1-5) directly related to one apecific phase of the program. Three paragraphs (i.e. par. 6-8) were designed to evaluate staff attitude about the program in general and how they felt about their participation in it.

Results: Of the twelve (12) surveys that were distributed, ten were returned. This represents a yield of approximately 83 percent. The results of this survey are presented in outline form below.

Paragraph 1. Development of a more meaningful curriculum.
70% - "yes"
20% - "no"
10% - "cannot determine"

Paragraph 2. More meaningful curricular experiences for Type A students.
70% - "yes"
10% - "no"
20% - "cannot determine"

Paragraph 3. Reduced social ostracism of Type A students.
70% - "yes"
30% - "cannot determine
0% - "no"

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[8] See Appendix 3 on page 47.

Paragraph 4. Improved student self-concept.
80% - "yes"
10% - "no"
10% - "cannot determine"

Paragraph 5. Better basic skills development due to resource room placement.
70% - "yes"
30% - "cannot determine"
0% - "no"

Paragraph 6. Could these student needs be met if resource room program were discontinued?
90% - "no"
10% - "cannot determine"

Paragraph 7. Staff attitude regarding participation in program.
80% - "enjoyed participation"
10% - "would prefer a different assignment"
10% - "no response"

Paragraph 8. Attitude concerning overall success of program.
90% - "very successful"
10% - "marginally successful"
0% - "unsuccessful"

Conclusions: From the foregoing summary of survey results, the following conclusions were arrived at:

(1) Paragraphs 1, 2 and 5 are all related to the curricular experiences offered to resource room students. As was noted previously, curriculum reorganization was one of the major goals of this program (i.e. Phase I). The data suggested that the majority of staff felt that the newly developed curricular experiences presented to resource room students were indeed more meaningful than previous

programming concepts.

(2) Paragraphs 3 and 4 were designed to test how well staff members thought the resource room approach contributed to the improvement of self concept of students who were often socially ostracised by peers. Again, the data suggested that participating teachers felt that in terms of this goal (as stated in Behavioral Objective #1) the program made a significant positive contribution.

(3) Paragraphs 6, 7 &8 seem to reflect that the "regular" class teachers who did participate in this program enjoyed the experience, felt that the overall program was very productive and very definitely felt that the needs of the type of students serviced by this program could not be met if the program were discontinued.

NON-EVALUATED PROGRAM FACTORS

Several additional facets of this program were not subjected to the foregoing evaluation design, but are considered intregal parts of the total resource room concept as developed during the past school year. These phases of the program are felt to be among the "key" factors which enhanced the overall success of this resource room approach and, as such, warrant equal status to the statistical data reported in the foregoing sections of this report.

Student Mobility: The resource room concept developed at North Junior High is unique in that the pattern of organization and class scheduling allows each student three programming options. Depending on his needs, the student may follow a regular resource room daily schedule (7 class periods), or he may spend part of all of his day in the resource room, or he may spend part or all of his day in more demanding seventh or eighth grade classes.

The intent of this program was to develop the skills of as many resource room students as possible so that placement outside of the program could be achieved. Despite problems related to scheduling, on the average, approximately 20 percent of the students originally enrolled in the resource room program were able to function in more demanding classes on a part time basis. This percent moreover, tended to increase as the school year progressed and it is felt that by the conclusion of the present school year a significant number of resource students

will have developed to the point that fall placement will be outside of this program!

Parent Involvement: The professional staff involved in the creation of this project felt strongly that its ability to more successfully operate would be increased by not only parental awareness, but more importantly, parental involvement. In September, 1972, a Parent Advisory Committee was established. Membership was open to the parents of all students enrolled in the resource room program and, as the name implies, their primary function was to advise the resource room staff.

Meetings were held at night on a monthly basis and were attended by both staff members and parents. The agenda generally followed a three-phase format. The first agenda item may be called the "parent feedback" phase. During this period parents were encouraged to raise questions, make suggestions, relate their child's home responses, etc. It was during this time that the parents' primary role of advising was exercised and from which many excellent suggestions for program improvement were made and later incorporated into the project. The second phase of each program consisted of the examination of a school or home related problem which the parents felt they would like to explore. Many times speakers or staff members made a formal presentation which was followed by a discussion period. The final phase of each meeting was devoted to informing parents about up-coming events, new curricular innovations to be used and planning for the next meeting.

All such meetings were well attended (often by both parents) and were felt to be a significant factor in the overall success of this project. The results of the "parent Reaction Survey" (See pages 31 and 32) seem to indicate that parent awareness and involvement led to a high degree of project support and endorsement.

Dissemination of Information: Too often new programs operate in isolation. That is, they exist and function within the awareness of a very small number of people. Recognizing this fact, and also the fact that by informing others very valuable reactions and suggestions were potentially available, a major effort was made to present the concepts of this pilot study to as wide an audience as possible. The scope of this dissemination effort is suggested in the "Calendar of Dissemination" activities which appears on page 41 of this report. It should be noted that these activities ranged from informing the building staff in which this program operated to a presentation at a state-wide convention.

To provide a concise presentation, a thirteen minute slide - tape program was prepared by several resource room staff members which outlined the major features of this project. This audio-visual aid provided a framework for audience reaction. This presentation is available for viewing upon request.

Transition: A common weakness of many new programs is that they often

fail to involve the personnel who act as "referring agents" prior to placement and "receiving agents" after a student completes placement. Parents and their child are often also neglected in the shuffle from one placement to another.

To help reduce the problems which transitions of this type often create, this resource room approach has incorporated several safeguards. First, all referring teachers are asked to attend an orientation meeting at which they are informed of this project's scope, limitations and overall organization. This information is then conveyed to the parents of any child they refer to this program. Parents, then, are encouraged to meet with resource room staff and also submit their reactions prior to placement of their child. In cases which involve Type A students, the parents are also requested to attend a formal screening meeting, and when possible, these students spend several orientation days in the resource room setting before placement procedures are initiated.

When students are moved to more demanding classrooms, or completely withdrawn from this program, again, no movement is made until parents and receiving instructors are fully informed and there is mutual agreement by all concerned that the transition is within the ability and/or best interests of the student.

These procedures have done much to eliminate the unnecessary confusion, friction and peripheral problems which so often have broken down lines of communication between professionals and parents.

CALENDAR OF DISSEMINATION ACTIVITIES

1972-1973

September (1972)	Total building staff orientation to Resource Room Program.
November (1972)	Presentation to all Special Education Personnel (Kalamazoo Valley Intermediate School District)
November (1972)	Presentation to all Special Education Staff (Southern Region, Kalamazoo County)
January (1973)	Televised slide tape presentation on local Educational Television station.
January (1973)	Presentation at "Conference on Resource Rooms for the Mentally Handicapped", Western Michigan University
March (1973)	Presentation at Michigan Council for Exceptional Children Convention
March (1973)	Presentation at Portage Public Schools In-Service Training Day

SUMMARY

The foregoing pages represent an attempt to as accurately as possible summarize the activities and results of a pilot project designed to better meet the learning needs of the educable mentally handicapped and opportunity group student. The information presented herein represents both an objective and subjective analysis of project results as evaluated at the conclusion of its first year of operation.

This report indicated that in terms of the five behavioral objectives upon which this project was based that, in general, all goals were achieved.

Subjective data also suggested that the parents of students involved in this project were very favorably impressed and felt a need to continue this or a like program.

The professional staff who participated in this program were likewise favorably predisposed and also felt that project concepts should be continued.

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Mr. David Shaw
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APPENDIX I

RESOURCE ROOM CALENDAR

1971-1973

October - June (1971-1972)	Curriculum Development Workshops (Weekly)
May (1972)	Student Evaluation and Testing
June (1972)	Screening Meeting
June - July (1972)	Summer curriculum Development Workshops
August 24 & 25 (1972)	Pre-School Orientation (Professional Staff)
August 29, (1972)	First Day of School
August - September (1972)	Subject Area Testing Completed
September (1972)	Parent Orientation and Parent Advisory Group Selection
September (1972)	Total building staff orientation to Program (slide-tape presentation and discussion)
October 5, 1972	Parent Advisory Council (First Meeting)
November 3, 1972	Slide-Tape Presentation to All Special Education Personnel (KVISD)
November 6, 1972	Slide-Tape Presentation to All Special Education Staff (Kalamazoo County, Southern Region)
November 28, 1972	Parent Advisory Council (2nd Meeting)
January 4, 1973	Discussion and Slide-Tape Presented on Educational Television (Channel 7)
January 26, 1973	Conference on Resource Rooms for the Mentally Handicapped (Western Michigan University)
February 28, 1973	Parent Advisory Council

March 10, 1973	Presentation to State CEC Convention
March 12, 1973	6th Grade Orientation (Principal and Staff)
March 16, 1973	Portage In-Service Day
March 1973	Parent Advisory Council

APPENDIX II

PARENT REACTION QUESTIONNAIRE

1. Do you feel that the classroom work given your child was:

   _____ too difficult for him.

   _____ too easy for him.

   _____ just about right.

2. Do you feel your child's reading and spelling skills:

   _____ improved this year.

   _____ did not improve.

   _____ stayed about the same.

3. Do you feel your child's arithmetic skills:

   _____ improved this year.

   _____ did not improve.

   _____ stayed about the same.

4. Do you feel that the Resource Room Program helped your child learn more than he otherwise would have?

   _____ Yes _____ No _____ Cannot tell

5. Many of you have met several resource room teachers. How would you rate them?

   _____ above average.

   _____ average.

   _____ below average.

6. Do you feel your child will need the help of a Resource Room Program next year?

   _____ Yes _____ No _____ Cannot tell

APPENDIX III

TEACHER QUESTIONNAIRE

1. One of the basic reasons for initiating the resource room program was the concern that the curriculum presented to our slow learners was often inappropriate. As a classroom teacher, do you feel that the curriculum (in your subject area) presented to resource room students during the past year was more meaningful in terms of their needs and abilities?

   Yes _____ No _____ Cannot Determine_____

2. Another concern of regular class teachers in the past was that they were often unable to provide meaningful, rewarding experiences for special education students who were "integrated" into their regular classrooms. Do you feel that the resource room program substantially increased your opportunities to provide for special education students?

   Yes _____ No _____ Cannot Determine _____

3. Our special education students have consistently been labelled and thus the victims of a degree of rejection by peers. From your observations (in and out of your classroom) has the resource room approach significantly contributed to the reduction of this problem?

   Yes _____ No _____ Cannot Determine _____

4. One of the major objectives of this program (as stated in our proposal) was to improve each students' self concept and social maturity. In general, do you feel that the majority of resource room students have made significant growth in this area?

   Yes _____ No _____ Cannot Determine _____

5. The majority of resource room students are academically behind grade-level peers. Do you feel that resource room placement has enabled these students to better develop these basic skills?

   Yes _____ No _____ Cannot Determine _____

6. Assuming that the resource room program was discontinued, do you feel that the kind of students we have worked with this year could be equally as well served if the present program was not offered?

   Yes _____ No _____ Cannot Determine _____

TEACHER QUESTIONNAIRE (Cont.)

7. As a classroom teacher did you enjoy your participation in the resource room program or would you prefer a different assignment?

   Enjoyed participation _____ Would prefer a different assignment ____

8. In overall terms, do you feel that in terms of your own participation the resource room program has been

   _____ Very successful

   _____ Marginally successful

   _____ Unsuccessful

APPENDIX IV

BUDGET SUMMARY